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Particle Size Conversion

	Sieve Designation		
	Standard	Mesh	Inches
Chemistry Products			
Chemical Synthesis			
Chemistry Services			
Drug Discovery			
Greener Alternatives	25.4 mm	1 in.	1.00
Solvent Center	22.6 mm	7/8 in.	0.875
Stable Isotopes	19.0 mm	3/4 in.	0.750
Stockroom Reagents	16.0 mm	5/8 in.	0.625
Chemical Products	13.5 mm	0.530 in.	0.530
Learning Center	12.7 mm	1/2 in.	0.500
Packaging Specifications	11.2 mm	7/16 in.	0.438
Product Guide Request	9.51 mm	3/8 in.	0.375
Lab Basics Technical	8.00 mm	5/16 in.	0.312
Library	6.73 mm	0.265 in.	0.265
Concentrations of	6.35 mm	1/4 in.	0.250
Acids & Bases	5.66 mm	No. 3 1/2	0.223
Particle Size	4.76 mm	No. 4	0.187
Conversion	4.00 mm	No. 5	0.157
Properties of Solvents	3.36 mm	No. 6	0.132
Syringe Needle	2.83 mm	No. 7	0.111
Gauge Chart	2.38 mm	No. 8	0.0937
Wire Gauge	2.00 mm	No. 10	0.0787
Conversion Chart	1.68 mm	No. 12	0.0661
Product Highlights	1.41 mm	No. 14	0.0555
Product Lines	1.19 mm	No. 16	0.0469
	1.00 mm	No. 18	0.0394
	0.841 mm	No. 20	0.0331
	0.707 mm	No. 25	0.0278
	0.595 mm	No. 30	0.0234
	0.500 mm	No. 35	0.0197
	0.420 mm	No. 40	0.0165
	0.354 mm	No. 45	0.0139
	0.297 mm	No. 50	0.0117
	0.250 mm	No. 60	0.0098
	0.210 mm	No. 70	0.0083
	0.177 mm	No. 80	0.0070
	0.149 mm	No. 100	0.0059
	0.125 mm	No. 120	0.0049
	0.105 mm	No. 140	0.0041
	0.088 mm	No. 170	0.0035
	0.074 mm	No. 200	0.0029
	0.063 mm	No. 230	0.0025

0.053 mm	No. 270	0.0021
0.044 mm	No. 325	0.0017
0.037 mm	No. 400	0.0015

Larger sieve openings (1 in. to 1/4 in.) have been designated by a sieve "mesh" size
Smaller sieve "mesh" sizes of 3 1/2 to 400 are designated by the number of opening

The following convention is used to characterize particle size by mesh designation:

- a "+" before the sieve mesh indicates the particles are retained by the sieve;
- a "-" before the sieve mesh indicates the particles pass through the sieve;
- typically 90% or more of the particles will lie within the indicated range.

For example, if the particle size of a material is described as -4 +40 mesh, then 90% (particles smaller than 4.76 mm) **and** be retained by a 40-mesh sieve (particles large mesh, then 90% or more of the material **will** pass through a 40-mesh sieve (particles

This information is also provided on page T848 of the Aldrich 2003-2004 Catalog/Handbook
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